

## STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

3100 Port of Benton Blvd • Richland, WA 99354 • (509) 372-7950

October 15, 2007

Ms. Shirley J. Olinger, Acting Manager Office of River Protection United States Department of Energy P.O. Box 450, MSIN: H6-60 Richland, Washington 99352 Mr. William S. Elkins, Project Director Bechtel National, Inc. 2435 Stevens Center Place, MSIN: H4-02 Richland, Washington 99354

Re: Submittal of Hanford Facility RCRA Permit Modification Notification Form 24590-LAW-PCN-ENV-07-006; Class <sup>1</sup>1 Modification to the Hanford Facility Dangerous Waste and Resource Conservation and Recovery Act (RCRA) Permit for the Treatment, Storage, and Disposal of Dangerous Waste, Part III, Operating Unit 10 (Waste Treatment and Immobilization Plant), WA7890008967

Dear Ms. Olinger and Mr. Elkins:

The Department of Ecology approves the referenced Class <sup>1</sup>1 Modification submitted September 26, 2007. The approved Hanford Facility RCRA Permit Modification Notification Form is enclosed.

Modification 24590-LAW-PCN-ENV-07-006 provides the updated Independent Qualified Registered Professional Engineer assessment (AREVA-IA-101, Revision 0) for the Low Activity Waste Secondary Offgas/Vessel Vent Process System, Caustic Collection Tank (LVP-TK-00001).

If there are any questions, contact me at 509-372-7882 or Tracy Gao at 509-372-7901.

whillulel

Sincerely,

Brenda Becker-Khaleel WTP Permit Writer Nuclear Waste Program

aah/jc Enclosure

cc: See next page

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**EDMC** 

Ms. Olinger and Mr. Elkins October 15, 2007 Page 2

### cc electronic w/enc:

John Eschenberg, USDOE
Lori Huffman, USDOE
Tony McKarns, USDOE
Gae Neath, USDOE
Don Sommer, USDOE
William Taylor, USDOE
William Taylor, USDOE
Brad Erlandson, BNI
Peggy Fisher, BNI
Stan Hill, BNI
Dennis Klein, BNI
Sandi Murdock, BN
Suzette Thompson, FHI
Phil Peistrup, WGI

### cc w/enc:

Administrative Record: Tank Waste Treatment Requirements

Environmental Portal

USDOE-ORP Correspondence Control

Date

24590-LAW-PCN-ENV-07-006

Quarter Ending September 30, 2007

# Hanford Facility RCRA Permit Modification Notification Form Part III, Operating Unit 10

### **Waste Treatment and Immobilization Plant**

#### Index

Page 2 of 2:

Hanford Facility RCRA Permit, Part III, Operating Unit 10, Waste Treatment and Immobilization Plant

Update the integrity assessment for the LAW Secondary Off-gas/Vessel Vent Process (LVP) System, Caustic Collection Tank (LVP-TK-00001), located in room L-0218, at Elevation 28'-0" of the LAW Vitrification Building

in Appendix 9.11 of the Dangerous Waste Permit.

Submitted by Co-Operator:

D. A. Klein

Reviewed by ORP Program Office:

proger /

Quarter Ending September 30, 2007

| Vent Process (LVP) System, Caustic Collection Tank (LVP-TK-00001), located in room L-0218, at Elevation 28'-0" of the LAW Vitrification Building. The following document is submitted to replace the document currently in Appendix 9.11.  Appendix 9.11  Replace: 24590-CM-HC4-HXYG-00138-02-00038, Rev. 0 With: AREVA-IA-101, Rev.0  This modification requests Ecology approval and incorporation into the permit the above mentioned integrity assessment report. The report has been updated by the Independent Qualified Registered Professional Engineer (IQRPE). The report reflects the IQRPE's review of the following final design documents:  • Mechanical Data Sheet, Facility and Vendor Fabrication Drawings, Specifications, and Material Requisitions produced in accordance with the following Reference:  • API-650 Standard, American Petroleum Institute, Welded Steel Tanks for Oil Storage  • 24590-CM-POA-MVA0-00019-02-00002, Rev. 00C, Design Calculations for LAW Caustic Collection Tank (LVP-Ti 00001)  • 24590-WTP-DB-ENG-01-001, Rev. 11, Basis of Design  • 24590-LAW-N1D-LVP-00002, Rev. 2, Corrosion Evaluation - Caustic Collection Tank LVP-TK-00001 (LAW)  • 24590-WTP-PER-PR-03-002, Rev. 2, Toxic Vapors and Emissions from WTP Tank Systems and Miscellaneous Treatment Unit Systems;  • 24590-WTP-PER-PR-03-001, Rev. 1, Prevention of Hydrogen Accumulation in WTP Tank Systems and Miscellaneous Treatment Unit Systems.  For each item of "Information Assessed" in the integrity assessment report, the items listed under the "Source of Informatio column were reviewed and found to furnish adequate design controls and requirements to ensure the design fully satisfies   | Hanford Facility RCRA Permit Modification Notification Form   |  |  |  |                               |  |
|--|---|--|--|--|-------------------------------|--|
| Description of Modification:  The purpose of this Class 1 prime modification is to update the Integrity Assessment of the LAW Secondary Off-gas/Vessel Vent Process (LVP) System, Caustic Collection Tank (LVP-TK-00001), located in room L-0218, at Elevation 28'-0" of the LAW Vitrification Building. The following document is submitted to replace the document currently in Appendix 9.11.  Appendix 9.11  Replace: 24590-CM-HC4-HXYG-00138-02-00038, Rev. 0 With: AREVA-IA-101, Rev.0  This modification requests Ecology approval and incorporation into the permit the above mentioned integrity assessment report. The report has been updated by the Independent Qualified Registered Professional Engineer (IQRPE). The report reflects the IQRPE's review of the following final design documents:  • Mechanical Data Sheet, Facility and Vendor Fabrication Drawings, Specifications, and Material Requisitions produced in accordance with the following Reference:  • API-650 Standard, American Petroleum Institute, Welded Steel Tanks for Oil Storage  • 24590-CM-POA-MVA0-00019-02-00002, Rev. 00C, Design Calculations for LAW Caustic Collection Tank (LVP-TI 00001)  • 24590-WTP-DB-ENG-01-001, Rev. 11, Basis of Design  • 24590-WTP-PER-PR-03-002, Rev. 2, Corrosion Evaluation - Caustic Collection Tank LVP-TK-00001 (LAW)  • 24590-WTP-PER-PR-03-002, Rev. 2, Toxic Vapors and Emissions from WTP Tank Systems and Miscellaneous Treatment Unit Systems;  • 24590-WTP-PER-PR-03-001, Rev. 1, Prevention of Hydrogen Accumulation in WTP Tank Systems and Miscellaneous Treatment Unit Systems.  For each item of "Information Assessed" in the integrity assessment report, the items listed under the "Source of Informatio column were reviewed and found to furnish adequate design controls and requirements to ensure the design fully satisfies the requirements of Washington Administrative Code, WAC-173-303-640; Dangerous Waste Regulations for Tank Systems and Please mark the Modification Class: 12 Class 1 Class 11 Class 2 Class 3 Please mark the Modification Class: 12 Class 1 | Unit:   |  | Permit Part & Chapter:                                 |  |                               |  |
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| Vent Process (LVP) System, Caustic Collection Tank (LVP-TK-0001), located in room L-0218, at Elevation 28'-0" of the LAW Vitrification Building. The following document is submitted to replace the document currently in Appendix 9.11.    Appendix 9.11  | Description of Modification:  |  |  |  |                               |  |
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| Enter Relevant WAC 173-303-830, Appendix I Modification citation number: NA  Enter wording of WAC 173-303-830, Appendix I Modification citation:   |   | Class 1  |  | Class 2                                  | Class 3                       |  |
| Enter wording of WAC 173-303-830, Appendix I Modification citation:  |   | - ·  |  |  |                               |  |
| Class <sup>1</sup> 1 modification. WAC 173-303-830(4)(d)(ii)(A) states, "Class 1 modifications apply to minor changes that keep the permit current with routine changes to facility or its operation. These changes do not substantially alter the permit condition or reduce the capacity of the facility to protect human health or the environment. In the case of Class 1 modifications, the director may require prior approval."   | Enter wording of WAC 173-303-830, Appendix I Modification In accordance with WAC 173-303-830(4)(d)(i), this modification Class <sup>1</sup> 1 modification. WAC 173-303-830(4)(d)(ii)(A) states, permit current with routine changes to facility or its operation or reduce the capacity of the facility to protect human health  | citation:<br>ion notification is<br>*Class 1 modifica<br>. These changes | requested to be<br>ations apply to m<br>do not substan | ninor changes the<br>tially alter the pe | at keep the<br>mit conditions |  |
| Modification Approved: Yes No (state reason for denial)  Reviewed by Ecology:  **B. Becker-Khaleel**  **Date**  **Da | Modification Approved: Yes No (state rea  | ason for denial)   | Below  | Medul                                    | 10/15/07                      |  |

Class 1 modifications requiring prior Agency approval.
 If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to a Class '1, if applicable.